

MAR 30 2000

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

Christie, Parker &amp; Hale,

PCT

NOTIFICATION OF TRANSMITTAL OF  
INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT

(PCT Rule 71.1)

To: LEROY T. RAHN  
CHRISTIE, PARKER & HALE, LLP  
P. O. BOX 7068  
PASADENA CA 91109-7068CASE # 33786 PCT. ACTION \_\_\_\_\_  
REMINDER \_\_\_\_\_ DUE DATE \_\_\_\_\_  
EXPIRATION DATE \_\_\_\_\_Date of Mailing  
(day/month/year)

27 MAR 2000

Applicant's or agent's file reference

33786PCT/LTR

## IMPORTANT NOTIFICATION

International application No.

PCT/US98/25490

International filing date (day/month/year)

01 DECEMBER 1998

Priority Date (day/month/year)

01 DECEMBER 1997

Applicant

STARSIGHT TELECAST, INC.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

MARK R. POWELL

Telephone No. (703) 308-5857

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

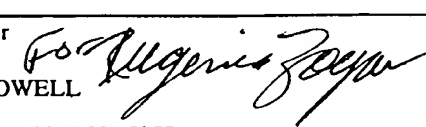
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 33786PCT/LTR	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US98/25490	International filing date (day/month/year) 01 DECEMBER 1998	Priority date (day/month/year) 01 DECEMBER 1997
International Patent Classification (IPC) or national classification and IPC IPC(6): H04N 7/16, 7/173 and US Cl.: 348/906, 563, 564, 565, 10; 455/6.2,6.3; 345/327		
Applicant STARSIGHT TELECAST, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets.
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of 0 sheets.

## 3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  29 JUNE 1999	Date of completion of this report  23 FEBRUARY 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer  MARK R. POWELL
Facsimile No. (703) 305-3230	Telephone No. (703) 308- 5857

**I. Basis of the report**

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain*

☒ the international application as originally filed.

☒ the description, pages 1-14, as originally filed.

pages NONE, filed with the demand.

pages NONE, filed with the letter of \_\_\_\_\_.

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☒ the claims, Nos. 1-10, as originally filed.

Nos. NONE, as amended under Article 19.

Nos. NONE, filed with the demand.

Nos. NONE, filed with the letter of \_\_\_\_\_.

Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☒ the drawings, sheets/fig 1-10, as originally filed.

sheets/fig NONE, filed with the demand.

sheets/fig NONE, filed with the letter of \_\_\_\_\_.

sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

☒ the description, pages none.

☒ the claims, Nos. none.

☒ the drawings, sheets/fig none.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the ~~Supplemental Box~~ Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims	<u>NONE</u>	YES
	Claims	<u>1-10</u>	NO
Inventive Step (IS)	Claims	<u>none</u>	YES
	Claims	<u>1-10</u>	NO
Industrial Applicability (IA)	Claims	<u>1-10</u>	YES
	Claims	<u>none</u>	NO

**2. CITATIONS AND EXPLANATIONS**

I. Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Lawler.  
considering claim 1, Lawler discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 16;
- 2) the claimed "a display monitor..." is met by fig. 1, item 20;
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information message and an advertising message" is met by fig 1, item 12, or fig. 6.

II. Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Rowe.  
considering claim 1, Rowe discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 34;
- 2) the claimed "a display monitor..." is met by fig. 1, item 38;
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information message and an advertising message" is met by fig 1, item 32, or fig. 2.

III. Claims 1-10 lack novelty under PCT Article 33(2) as being anticipated by Alten.

Considering claim 1, Alten discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 20;
- 2) the claimed "a display monitor..." is inherently disclosed in fig. 5a; and
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information message and an advertising message" is met by fig 1, item 100 and fig. 7a, with the --promo text window-- and the --video promo window-- representing the information message and the advertising message as claimed.

Regarding claim 2, the claimed "information and advertising (Continued on Supplemental Sheet.)

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):**

messages are displayed in pop-up areas" is inherent in fig. 7a.

As per claim 3, the claimed "informational messages relate to the content of the recovered television signal" is inherent in Alten's disclosure.

In claim 4, the claimed "informational messages relate to later programming on the channel of the recovered television signal" is inherently disclosed in fig. 7a.

Re claim 5, the claimed "informational messages relate to current programming" is inherent in Alten.

In claim 6, the claimed "means for displaying a composite of an EPG and an advertising message" is met by fig 1, item 100.

In claim 7, the claimed "means for displaying an EPG alone" is met by fig 1, item 100, and fig. 5b.

As per claim 8, the claimed "means for storing EPG data..." is met by fig. 1, item 120.

In claim 9, the claimed "means for using the stored background color value to display the EPG alone" is inherent in fig. 1, item 100.

In claim 10, the claimed "means for substituting a transparent value for the stored background color value to display the composite" is inherent in Alten.

## ----- NEW CITATIONS -----

US 5,635,978 A (ALTEN ET AL.) 03 JUNE 1997, SEE FIGS. 1 AND 7.

# INTERNET COOPERATION TREATY

WWW LTR  
RECEIVED

OCT 18 1999

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

**PCT**

Christie, Parker & Hale, LLP

WRITTEN OPINION

(PCT Rule 66)

<b>To:</b> LEROY T. RAHN CHRISTIE, PARKER & HALE, LLP P. O. BOX 7068 PASADENA CA 91109-7068	
CASE # <u>33786 PCT</u> ACTION <u>Reply to Written Opinion</u> REMINDER <u>12/13/99</u> DEADLINE _____	

Date of Mailing (day/month/year)	<b>13 OCT 1999</b>
-------------------------------------	--------------------

Applicant's or agent's file reference 33786PCT/LTR		<b>REPLY DUE</b> within TWO months from the above date of mailing
International application No. PCT/US98/25490	International filing date (day/month/year) 01 DECEMBER 1998	Priority date (day/month/year) 01 DECEMBER 1997
International Patent Classification (IPC) or both national classification and IPC IPC(6): H04N 7/16, 7/173 and US Cl.: 348/906, 563, 564, 565, 10; 455/6.2, 6.3; 345/327		
Applicant STARSIGHT TELECAST, INC.		

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
  - I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step or industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.
 

**When?** See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).~~

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For an additional opportunity to submit amendments, see Rule 66.4.  
 For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 *bis*.  
 For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 01 APRIL 2000

Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer <i>For Raymond Zagan</i> JOHN K. PENG Telephone No. (703) 308- 5857
--	--

PATENT COOPERATION TREATY

5787-33786-PCT

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

**PCT**

WRITTEN OPINION

(PCT Rule 66)

To: LEROY T. RAHN  
CHRISTIE, PARKER & HALE, LLP  
P. O. BOX 7068  
PASADENA CA 91109-7068

Date of Mailing  
(day/month/year)

13 OCT 1999

Applicant's or agent's file reference  
33786PCT/LTR

REPLY DUE within TWO months  
from the above date of mailing

International application No.  
PCT/US98/25490

International filing date (day/month/year)  
01 DECEMBER 1998

Priority date (day/month/year)  
01 DECEMBER 1997

International Patent Classification (IPC) or both national classification and IPC  
IPC(6): H04N 7/16, 7/173 and US Cl.: 348/906, 563, 564, 565, 10; 455/6.2, 6.3; 345/327

Applicant  
STARSIGHT TELECAST, INC.

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
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- III ☐ Non-establishment of opinion with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).~~

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 *bis*.  
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If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

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Name and mailing address of the IPEA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

JOHN K. PENG

Telephone No. (703) 308- 5857

**I. Basis of the opinion**

1. This opinion has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an imitation under Article 14 are referred to in this opinion as "originally filed")*:

☒ the international application as originally filed.

☒ the description, pages 1-14 , as originally filed.

pages NONE , filed with the demand.

pages NONE , filed with the letter of \_\_\_\_\_.

☒ the claims, Nos. 1-10 , as originally filed.

Nos. NONE , as amended under Article 19.

Nos. NONE , filed with the demand.

Nos. NONE , filed with the letter of \_\_\_\_\_.

☒ the drawings, sheets/~~fig~~ 1-10 , as originally filed.

sheets/~~fig~~ NONE , filed with the demand.

sheets/~~fig~~ NONE , filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

☒ the description, pages none

☒ the claims, Nos. none

☒ the drawings, sheets/~~fig~~ none

3. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the ~~Supplemental Box~~ Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE



**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1-10</u>	NO
Inventive Step (IS)	Claims <u>none</u>	YES
	Claims <u>1-10</u>	NO
Industrial Applicability (IA)	Claims <u>1-10</u>	YES
	Claims <u>none</u>	NO

**2. CITATIONS AND EXPLANATIONS**

I. Claim 1 lack novelty under PCT Article 33(2) as being anticipated by Lawler.  
considering claim 1, Lawler discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 16;
- 2) the claimed "a display monitor..." is met by fig. 1, item 20;
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 12, or fig. 6.

II. Claim 1 lack novelty under PCT Article 33(2) as being anticipated by Rowe.  
considering claim 1, Rowe discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 34;
- 2) the claimed "a display monitor..." is met by fig. 1, item 38;
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 32, or fig. 2.

III. Claims 1-10 lack novelty under PCT Article 33(2) as being anticipated by Alten.

Considering claim 1, Alten discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 20;
- 2) the claimed "a display monitor..." is inherently disclosed in fig. 5a; and
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 100 and fig. 7a, with the --promo text window-- and the --video promo window-- representing the information meassage and the advertising message as claimed.

Regarding claim 2, the claimed "information and advertising (Continued on Supplemental Sheet.)

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**TIME LIMIT:**

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

**V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):**

messages are displayed in pop-up areas" is inherent in fig. 7a.

As per claim 3, the claimed "informational messages relate to the content of the recovered television signal" is inherent in Alten's disclosure.

In claim 4, the claimed "informational messages relate to later programming on the channel of the recovered television signal" is inherently disclosed in fig. 7a.

Re claim 5, the claimed "informational messages relate to current programming" is inherent in Alten.

In claim 6, the claimed "means for displaying a composite of an EPG and an advertising message" is met by fig 1, item 100.

In claim 7, the claimed "means for displaying an EPG alone" is met by fig 1, item 100, and fig. 5b.

As per claim 8, the claimed "means for storing EPG data..." is met by fig. 1, item 120.

In claim 9, the claimed "means for using the stored background color value to display the EPG alone" is inherent in fig. 1, item 100.

In claim 10, the claimed "means for substituting a transparent value for the stored background color value to display the composite" is inherent in Alten.

**----- NEW CITATIONS -----**

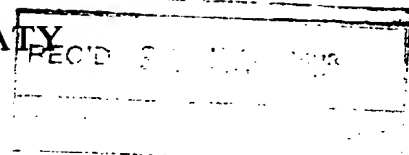
US 5,635,978 A (ALTEN ET AL.) 03 JUNE 1997, SEE FIGS. 1 AND 7.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 33786PCT/LTR	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US98/25490	International filing date (day/month/year) 01 DECEMBER 1998	Priority date (day/month/year) 01 DECEMBER 1997
International Patent Classification (IPC) or national classification and IPC IPC(6): H04N 7/16, 7/173 and US Cl.: 348/906, 563, 564, 565, 10; 455/6.2.6.3; 345/327		
Applicant STARSIGHT TELECAST, INC.		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>2</u> sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step or industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>

Date of submission of the demand  29 JUNE 1999	Date of completion of this report  23 FEBRUARY 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer  MARK R. POWELL <i>For Eugene J. Zepa</i>
Facsimile No. (703) 305-3230	Telephone No. (703) 308- 5857

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/25490

## I. Basis of the report

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain*

☒ the international application as originally filed.

☒ the description, pages 1-14 , as originally filed.

pages NONE , filed with the demand.

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☒ the claims, Nos. 1-10 , as originally filed.

Nos. NONE , as amended under Article 19.

Nos. NONE , filed with the demand.

Nos. NONE , filed with the letter of \_\_\_\_\_.

Nos. \_\_\_\_\_ , filed with the letter of \_\_\_\_\_.

☒ the drawings, sheets/fig 1-10 , as originally filed.

sheets/fig NONE , filed with the demand.

sheets/fig NONE , filed with the letter of \_\_\_\_\_.

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2. The amendments have resulted in the cancellation of:

☒ the description, pages none .

☒ the claims, Nos. none .

☒ the drawings, sheets/fig none .

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the ~~Supplemental Box~~ Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/25490

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims	<u>NONE</u>	YES
	Claims	<u>1-10</u>	NO
Inventive Step (IS)	Claims	<u>none</u>	YES
	Claims	<u>1-10</u>	NO
Industrial Applicability (IA)	Claims	<u>1-10</u>	YES
	Claims	<u>none</u>	NO

**2. CITATIONS AND EXPLANATIONS**

- I. Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Lawler.  
considering claim 1, Lawler discloses all claimed subject matter:  
1) the claimed "receiver for recovering television signal" is met by fig. 1, item 16;  
2) the claimed "a display monitor..." is met by fig. 1, item 20;  
3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 12, or fig. 6.
- II. Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Rowe.  
considering claim 1, Rowe discloses all claimed subject matter:  
1) the claimed "receiver for recovering television signal" is met by fig. 1, item 34;  
2) the claimed "a display monitor..." is met by fig. 1, item 38;  
3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 32, or fig. 2.
- III. Claims 1-10 lack novelty under PCT Article 33(2) as being anticipated by Alten.  
Considering claim 1, Alten discloses all claimed subject matter:  
1) the claimed "receiver for recovering television signal" is met by fig. 1, item 20;  
2) the claimed "a display monitor..." is inherently disclosed in fig. 5a; and  
3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 100 and fig. 7a, with the --promo text window-- and the --video promo window-- representing the information meassage and the advertising message as claimed.  
Regarding claim 2, the claimed "information and advertising (Continued on Supplemental Sheet.)

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):**

messages are displayed in pop-up areas" is inherent in fig. 7a.

As per claim 3, the claimed "informational messages relate to the content of the recovered television signal" is inherent in Alten's disclosure.

In claim 4, the claimed "informational messages relate to later programming on the channel of the recovered television signal" is inherently disclosed in fig. 7a.

Re claim 5, the claimed "informational messages relate to current programming" is inherent in Alten.

In claim 6, the claimed "means for displaying a composite of an EPG and an advertising message" is met by fig 1, item 100.

In claim 7, the claimed "means for displaying an EPG alone" is met by fig 1, item 100, and fig. 5b.

As per claim 8, the claimed "means for storing EPG data..." is met by fig. 1, item 120.

In claim 9, the claimed "means for using the stored background color value to display the EPG alone" is inherent in fig. 1, item 100.

In claim 10, the claimed "means for substituting a transparent value for the stored background color value to display the composite" is inherent in Alten.

## ----- NEW CITATIONS -----

US 5,635,978 A (ALTEN ET AL.) 03 JUNE 1997, SEE FIGS. 1 AND 7.

# PATENT COOPERATION TREATY

① WWM  
② LTR RECEIVED  
MAR 30 2000  
Christie, Parker & Hale, LL

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

## PCT

### NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

To: LEROY T. RAHN CHRISTIE, PARKER & HALE, LLP P. O. BOX 7068 PASADENA CA 91109-7068	
CASE # <b>33786 PCT.</b>	ACTION _____
REMINDER _____	DUE DATE _____
DEADLINE _____	

Date of Mailing (day/month/year)	<b>27 MAR 2000</b>
-------------------------------------	--------------------

Applicant's or agent's file reference <b>33786PCT/LTR</b>		<b>IMPORTANT NOTIFICATION</b>
International application No. <b>PCT/US98/25490</b>	International filing date (day/month/year) <b>01 DECEMBER 1998</b>	Priority Date (day/month/year) <b>01 DECEMBER 1997</b>
Applicant <b>STARSIGHT TELECAST, INC.</b>		

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

**4. REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer <b>MARK R. POWELL</b> <i>for Virginia Zeyan</i>
Facsimile No. (703) 305-3230	Telephone No. (703) 308- 5857

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 33786PCT/LTR	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US98/25490	International filing date ( <i>day/month/year</i> ) 01 DECEMBER 1998	Priority date ( <i>day/month/year</i> ) 01 DECEMBER 1997
International Patent Classification (IPC) or national classification and IPC IPC(6): H04N 7/16, 7/173 and US Cl.: 348/906, 563, 564, 565, 10; 455/6.2,6.3; 345/327		
Applicant STARSIGHT TELECAST, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets.  
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
 These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:
  - I ☒ Basis of the report
  - II ☐ Priority
  - III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand  29 JUNE 1999	Date of completion of this report  23 FEBRUARY 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer <div style="text-align: center;">               MARK R. POWELL           </div>
Facsimile No. (703) 305-3230	Telephone No. (703) 308- 5857



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/25490

## I. Basis of the report

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain*

☒ the international application as originally filed.

☒ the description, pages 1-14, as originally filed.

pages NONE, filed with the demand.

pages NONE, filed with the letter of \_\_\_\_\_.

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☒ the claims, Nos. 1-10, as originally filed.

Nos. NONE, as amended under Article 19.

Nos. NONE, filed with the demand.

Nos. NONE, filed with the letter of \_\_\_\_\_.

Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☒ the drawings, sheets/~~fig~~ 1-10, as originally filed.

sheets/~~fig~~ NONE, filed with the demand.

sheets/~~fig~~ NONE, filed with the letter of \_\_\_\_\_.

sheets/~~fig~~ \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

☒ the description, pages none.

☒ the claims, Nos. none.

☒ the drawings, sheets/~~fig~~ none.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the ~~Supplemental Box~~ Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/25490

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims	<u>NONE</u>	YES
	Claims	<u>1-10</u>	NO
Inventive Step (IS)	Claims	<u>none</u>	YES
	Claims	<u>1-10</u>	NO
Industrial Applicability (IA)	Claims	<u>1-10</u>	YES
	Claims	<u>none</u>	NO

**2. CITATIONS AND EXPLANATIONS**

I. Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Lawler.  
considering claim 1, Lawler discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 16;
- 2) the claimed "a display monitor..." is met by fig. 1, item 20;
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 12, or fig. 6.

II. Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Rowe.  
considering claim 1, Rowe discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 34;
- 2) the claimed "a display monitor..." is met by fig. 1, item 38;
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 32, or fig. 2.

III. Claims 1-10 lack novelty under PCT Article 33(2) as being anticipated by Alten.

Considering claim 1, Alten discloses all claimed subject matter:

- 1) the claimed "receiver for recovering television signal" is met by fig. 1, item 20;
- 2) the claimed "a display monitor..." is inherently disclosed in fig. 5a; and
- 3) the claimed "means for displaying on the monitor simultaneously with the recovered ...an information meassage and an advertising message" is met by fig 1, item 100 and fig. 7a, with the --promo text window-- and the --video promo window-- representing the information meassage and the advertising message as claimed.

Regarding claim 2, the claimed "information and advertising (Continued on Supplemental Sheet.)

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):  
messages are displayed in pop-up areas" is inherent in fig. 7a.

As per claim 3, the claimed "informational messages relate to the content of the recovered television signal" is inherent in Alten's disclosure.

In claim 4, the claimed "informational messages relate to later programming on the channel of the recovered television signal" is inherently disclosed in fig. 7a.

Re claim 5, the claimed "informational messages relate to current programming" is inherent in Alten.

In claim 6, the claimed "means for displaying a composite of an EPG and an advertising message" is met by fig 1, item 100.

In claim 7, the claimed "means for displaying an EPG alone" is met by fig 1, item 100, and fig. 5b.

As per claim 8, the claimed "means for storing EPG data..." is met by fig. 1, item 120.

In claim 9, the claimed "means for using the stored background color value to display the EPG alone" is inherent in fig. 1, item 100.

In claim 10, the claimed "means for substituting a transparent value for the stored background color value to display the composite" is inherent in Alten.

## ----- NEW CITATIONS -----

US 5,635,978 A (ALTEN ET AL.) 03 JUNE 1997, SEE FIGS. 1 AND 7.

PCT

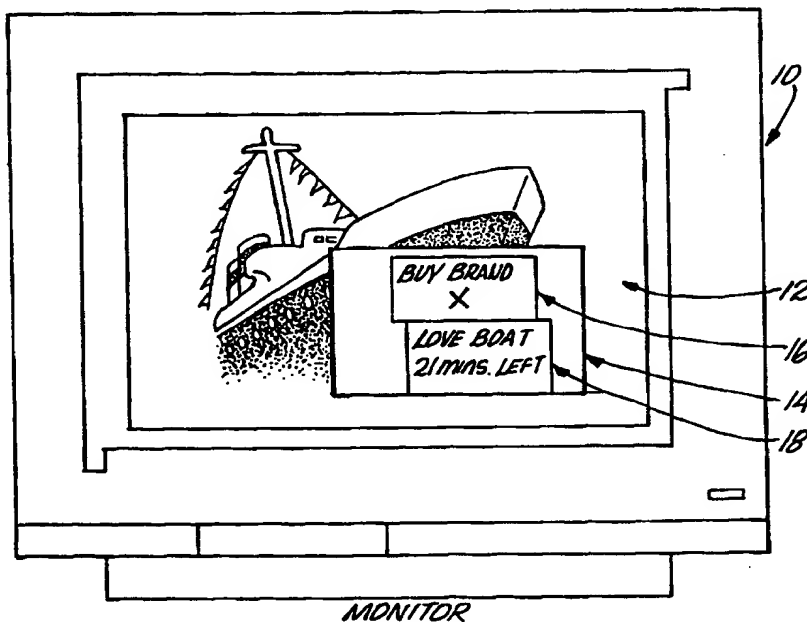
WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>H04N 7/16, 7/173</b>		A1	(11) International Publication Number: <b>WO 99/29109</b>
			(43) International Publication Date: 10 June 1999 (10.06.99)
(21) International Application Number: PCT/US98/25490		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 1 December 1998 (01.12.98)			
(30) Priority Data: 60/067,483 1 December 1997 (01.12.97) US 60/067,038 1 December 1997 (01.12.97) US			
(71) Applicant (for all designated States except US): STARSIGHT TELECAST, INC. [US/US]; 3rd floor, 39650 Liberty Street, Fremont, CA 94538 (US).			
(72) Inventor; and (75) Inventor/Applicant (for US only): JORLICK, Jonathan, B. [US/US]; 2236 Bess Avenue, Livermore, CA 94550 (US).			
(74) Agent: RAHN, LeRoy, T.; Christie, Parker & Hale, LLP, P.O. Box 7068, Pasadena, CA 91109-7068 (US).			
		Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	

(54) Title: ELECTRONIC PROGRAM GUIDE SYSTEM WITH ADVERTISING MESSAGES IN POP-UPS



(57) Abstract

In one embodiment, informational messages (18) about the program or channel to which a television receiver is tuned and advertising messages (16) are displayed simultaneously with the current television program (14). In another embodiment, an EPG is displayed in a composite with an advertising message (Fig. 11A-11C). Before such display, the microprocessor (100) substitutes a transparency value for the stored background color value used to display the EPG alone in the conventional fashion on a background of a solid color or colors.

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
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DE	Germany	LK	Sri Lanka	SD	Sudan		
DK	Denmark	LR	Liberia	SE	Sweden		
EE	Estonia			SG	Singapore		

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US98/25490

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : H04N 7/16, 7/173

US CL : 348/906, 563, 564, 565, 10; 455/6.2,6.3; 345/327

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 348/906, 563, 564, 565, 10; 455/6.2,6.3; 345/327

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,623,613 A (ROWE ET AL) 22 April 1997, FIG. 1 & 3; COLS. 5-6.	1-8
Y	5,666,645 A (THOMAS ET AL) 09 September 1997, COLS. 1-2.	1-8
Y	5,850,218 A (LAJOIE ET AL) 15 December 1998, FIG. 20, COL. 5.	1-8
Y	5,585,838 A (LAWLER ET AL) 17 December 1996, FIG. 6.	1-8



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*B* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

26 JANUARY 1999

Date of mailing of the international search report

05 APR 1999

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

WESNER SAJOUS

Telephone No. (703) 308-5857

# PATENT COOPERATION TREATY

LTR

From the INTERNATIONAL SEARCHING AUTHORITY

<p>To: LEROY T. RAHN CHRISTIE, PARKER &amp; HALE, LLP P. O. BOX 7068 PASADENA CA 91109-7068</p>	<p><b>RECEIVED</b></p> <p><b>APR 10 1999</b></p>
<p><i>Christie, Parker &amp; Hale, LLP</i></p>	
<p>CASE # <b>33786 PCT</b> ACTION <b>2</b> <i>Christie, Parker &amp; Hale, LLP</i> <i>U.S.?</i></p>	
<p>REMINDER _____ DUE DATE _____</p>	
<p>DEADLINE _____</p>	

**PCT**

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT  
OR THE DECLARATION

(PCT Rule 44.1)

<p>Applicant's or agent's file reference <b>33786PCT/LTR</b></p>	<p>Date of Mailing (day/month/year) <b>05 APR 1999</b></p>
<p>International application No. <b>PCT/US98/25490</b></p>	<p>International filing date (day/month/year) <b>01 DECEMBER 1998</b></p>
<p>Applicant <b>STARSIGHT TELECAST, INC.</b></p>	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

**Filing of amendments and statement under Article 19:**

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland  
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90 bis 1 and 90 bis 3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

<p>Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231</p>	<p>Authorized officer <b>WESNER SAJOUS</b> <i>Wesner Sajous</i></p>
<p>Facsimile No. (703) 305-3230</p>	<p>Telephone No. (703) 308-5857</p>

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 33786PCT/LTR	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US98/25490	International filing date (day/month/year) 01 DECEMBER 1998	(Earliest) Priority Date (day/month/year) 01 DECEMBER 1997
Applicant STARSIGHT TELECAST, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (See Box I).
2. ☐ Unity of invention is lacking (See Box II).
3. ☐ The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing
  - ☐ filed with the international application.
  - ☐ furnished by the applicant separately from the international application,
    - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in the international application as filed.
  - ☐ transcribed by this Authority.
4. With regard to the title,
  - ☒ the text is approved as submitted by the applicant.
  - ☐ the text has been established by this Authority to read as follows:
5. With regard to the abstract,
  - ☐ the text is approved as submitted by the applicant.
  - ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. The figure of the drawings to be published with the abstract is:  
Figure No. 1
  - ☒ as suggested by the applicant.
  - ☐ because the applicant failed to suggest a figure.
  - ☐ because this figure better characterizes the invention.

☐ None of the figures.



Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

## NEW ABSTRACT

IN ONE EMBODIMENT, INFORMATIONAL MESSAGES (18) ABOUT THE PROGRAM OR CHANNEL TO WHICH A TELEVISION RECEIVER IS TUNED AND AN ADVERTISING MESSAGES (16) ARE SIMULTANEOUSLY DISPLAYED WITH THE CURRENT TELEVISION PROGRAM (14). IN ANOTHER EMBODIMENT, AN EPG IS DISPLAYED IN A COMPOSITE WITH AN ADVERTIZING MESSAGE (FIG. 11A-11C). BEFORE SUCH DISPLAY, THE MICROPROCESSOR (100) SUBSTITUTES A TRANSPARENCY VALUE FOR THE STORED BACKGROUND COLOR VALUE USED TO DISPLAY THE EPG ALONE IN THE CONVENTIONAL FASHION ON A BACKGROUND OF A SOLID COLOR OR COLORS.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US98/25490

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : H04N 7/16, 7/173

US CL : 348/906, 563, 564, 565, 10; 455/6.2,6.3; 345/327

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 348/906, 563, 564, 565, 10; 455/6.2,6.3; 345/327

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,623,613 A (ROWE ET AL) 22 April 1997, FIG. 1 & 3; COLS. 5-6.	1-8
Y	5,666,645 A (THOMAS ET AL) 09 September 1997, COLS. 1-2.	1-8
Y	5,850,218 A (LAJOIE ET AL) 15 December 1998, FIG. 20, COL. 5.	1-8
Y	5,585,838 A (LAWLER ET AL) 17 December 1996, FIG. 6.	1-8

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Z* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

26 JANUARY 1999

Date of mailing of the international search report

05 APR 1999

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

WESNER SAJOUS

Telephone No. (703) 308- 5857